STATE OF CALIFORNIA

PETE WILSON, *Governor*

PUBLIC UTILITIES COMMISSION
550 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 2, 1995

DOCKET FILE COPY ORIGINAL

William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W.
Room 222
Washington, D.C. 20554

Re: PR Docket No. 94-105

Dear Mr. Caton:

Please find enclosed for filing an original and ten copies of the Reply by California to Supplemental Comments In Opposition to Petition to Retain Regulatory Authority Over Intrastate Cellular Service Rates by the People of the State of California and the Public Utilities Commission of the State of California ("CPUC") in the above-referenced docket. This filing is subject to the Protective Order in this docket. The accompanying original and 10 copies contain no confidential information, as defined in the Protective Order. Pursuant to Sections 7(a) and 7(b) of the Protective order, pages containing references to confidential information are being filed separately under separate cover letter.

Also enclosed is an extra copy of this filing. Kindly file-stamp this copy and return it to me in the enclosed, self-addressed stamped envelope.

If you have any questions, please call the undersigned at (415) 703-2047.

Sincerely,

Ellen S. LeVine
Counsel for CPUC

ESL:nas

Enclosures

ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	
Petition of the State of California and the Public Utilities Commission of the State of California to Retain Regulatory Authority Over Intrastate Cellular Service Rates	PR Docket No. 94-105

REPLY BY CALIFORNIA TO SUPPLEMENTAL COMMENTS IN OPPOSITION TO PETITION TO RETAIN REGULATORY AUTHORITY OVER INTRASTATE CELLULAR SERVICE RATES

REDACTED VERSION

PETER ARTH, JR.
EDWARD W. O'NEILL
ELLEN S. LEVINE

505 Van Ness Avenue
San Francisco, CA 94102
(415) 703-2047

Attorneys for the People of the State of California and the Public Utilities Commission of the State of California

March 2, 1995

TABLE OF CONTENTS

	Page
SUMMARY	ii
A. Background	3
I. THE CPUC HAS MET THE STATUTORY STANDARD PRESCRIBED BY CONGRESS IN DEMONSTRATING THAT CONTINUED REGULATORY OVERSIGHT OF THE CELLULAR INDUSTRY IN CALIFORNIA IS WARRANTED	7
A. The CPUC Has Correctly Applied the Statutory Standard Expressly Set Forth in the Budget Act	7
B. The CPUC Properly Relied On U.S. Department Of Justice Guidelines In Finding That Intrastate Cellular Markets Are Not Yet Competitive	10
II. SUBSTANTIAL BARRIERS TO ENTRY HAVE PROTECTED INCUMBENT CELLULAR CARRIERS AND HAVE PREVENTED THE EMERGENCE OF COMPETITIVE ALTERNATIVES IN CALIFORNIA CELLULAR MARKETS	11
III. THE MARKETS FOR CELLULAR SERVICES IN CALIFORNIA ARE HIGHLY CONCENTRATED AND ARE EVIDENCE OF UNDUE MARKET POWER	14
IV. THE SUPRACOMPETITIVE RETURNS EARNED BY CELLULAR CARRIERS IN CALIFORNIA ARE EVIDENCE OF UNDUE MARKET POWER	17
V. CHANGES IN CELLULAR PRICES DO NOT EVIDENCE COMPETITION	24
A. The Hausman Study Does Not Show that Cellular Prices Are Declining Faster Than Costs	27
B. The Hausman Study Is Fraught With Other Serious Errors	29
C. The AG Data Corroborates Evidence That Cellular Carriers Exercise Undue Market Power	33
VI. CAPACITY UTILIZATION RATES DO NOT EXPLAIN HIGH CELLULAR PRICES	37
APPENDIX A	
CERTIFICATE OF SERVICE	

SUMMARY

The CPUC has presented substantial evidence demonstrating that market conditions within California cellular markets are not yet adequately competitive in order to ensure just and reasonable rates for cellular services to California's residential and business consumers. The evidence identified the existence currently of significant barriers to entry by other competitors; the highly concentrated nature of the cellular markets; the supracompetitive returns earned by the duopoly carriers; the absence of any correlation between cellular price reductions and the competitiveness of the market; the pattern and practice of parallel pricing behavior; and the presence of interlocking ownership alliances between carriers within and among markets.

Taken as a whole, this evidence strongly supports the CPUC's finding that cellular service markets in California are not yet effectively competitive. The CPUC has thus asked for continued regulatory oversight for a limited period of time in order to implement its cellular unbundling program to enable switch-based resellers to emerge as competitive alternatives to existing service providers.

The material released under protective order pursuant to the FCC's confidentiality orders is additional corroborative evidence of the above. The cellular carriers, however, continue their campaign to defeat the CPUC petition by mischaracterizing the facts, or otherwise manipulating or discounting altogether the protected material in order to achieve their desired result. Their further studies to buttress their claims are as seriously

flawed as those previously submitted. And their repeated claims that certain cellular prices have fallen over time says nothing about whether current price levels are just and reasonable, or whether cellular markets are competitive. In fact, neither is true.

In short, the cellular carriers simply have not, and cannot, rebut the evidence and findings presented by the CPUC. The CPUC petition meets the standard set forth in the Omnibus Budget Reconciliation Act of 1993, and is consistent with congressional intent that recognizes that states should be allowed to continue their regulatory oversight of carriers to ensure just and reasonable rates to consumers in markets that are not yet effectively competitive. The CPUC petition should therefore be granted.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
	)	PR Docket No. 94-105
Petition of the State of California and the Public Utilities Commission of the State of California to Retain Regulatory Authority Over Intrastate Cellular Service Rates	)	

REPLY BY CALIFORNIA TO SUPPLEMENTAL COMMENTS IN OPPOSITION TO PETITION TO RETAIN REGULATORY AUTHORITY OVER INTRASTATE CELLULAR SERVICE RATES

The People of the State of California and the Public Utilities Commission of the State of California ("CPUC") hereby reply to the supplemental comments filed by the cellular carriers in opposition to the CPUC's Petition to Retain State Regulatory Authority Over Intrastate Cellular Service Rates in the above-referenced docket.[1] The cumulative arguments made by the incumbent duopolist carriers add nothing to rebut the CPUC's finding, based on substantial evidence, that cellular service markets in California are not yet sufficiently competitive to ensure just and reasonable rates for California business and residential customers. That evidence establishes, and no one has rebutted, that:

1. Hereafter, the CPUC petition and Reply by California to Oppositions to CPUC Petition to Retain Regulatory Authority Over Intrastate Cellular Service Rate, will be referenced as "CPUC Pet." and "CPUC Reply."

- Significant barriers to entry have kept competition from emerging. Personal Communications Services ("PCS"), a likely substitute for cellular service, will have to develop a geographically dispersed and operational network prior to offering service at competitive prices.

- Based on well-accepted statistical indices used by the Federal Communications Commission ("FCC") and the U.S. Department of Justice, the market for cellular services is and will remain highly concentrated even if Nextel were a viable competitor today. The high degree of market concentration (HHI Index of 3750) is strong evidence of market power by the incumbent duopolist cellular carriers.

- The incumbent duopolist cellular carriers are earning supracompetitive rates of return which are not commensurate with returns earned in a competitive market. The average rate of return on net investment of the incumbent carriers in the three major urban markets in California were 30.9 percent over 1989-1993. These returns compare to an average of only 13.9 percent over the same period for the telecommunications service industry as a whole.

- The extraordinarily high value for cellular licenses at $200 per POP compared to a value of only $14 per POP for broadband PCS licenses can only reasonably be attributed to the cellular carriers' ability to extract duopoly rents due to the current lack of effective competition. In contrast, the substantially lower value of PCS licenses demonstrate that PCS licensees anticipate a much more competitive market than cellular carriers currently enjoy.

- Q-ratio analysis, a well-accepted methodology for determining market power, indicates that the incumbent duopolist cellular carriers enjoy undue market power. In a competitive industry, the Q-ratio is close to 1. The cellular industry's Q-ratio is between 6.7 and 13.5. The additional value given cellular firms beyond the value of their assets reflects the expectation that such firms can earn duopoly rents.

- Prices for cellular services in California have not substantially declined commensurate with what would be expected in effectively competitive markets. Revenue Per Minute of Use for California's cellular carriers has fallen by just 5.6 percent in real terms between 1989 and 1993, or a mere 1.4 percent per year. Basic cellular rates have remained high despite declining costs. Evidence of parallel pricing behavior and interlocking ownership alliances between carriers further indicate that cellular markets are not engaging in price competition.

This evidence as a whole supports continued oversight by the CPUC of intrastate cellular service rates for a limited period of time until competitive alternatives to cellular services are available to provide customers with a meaningful choice of services at just and reasonable rates. As discussed in our petition, the CPUC is actively encouraging additional competition in California cellular markets under its unbundling program. The unbundling program, currently being implemented, is designed to allow switch-based resellers to interconnect with the incumbent duopolists. The CPUC expects that within the eighteen month period commencing September 1, 1994, the unbundling program will be in place to allow switch-based competition to emerge and to enhance consumer choice.

Notwithstanding all of the above, the cellular carriers persist in ignoring evidence that is damaging to their cause and which they are unable to refute; persist in distorting the CPUC's market analysis, which is based on well-accepted, standard economic principles; and continue to concoct new "studies" designed to produce their desired result. They further advocate a self-generated statutory standard that virtually no one could meet in order to defeat the CPUC petition.

In the end, the substantial evidence summarized above, and fully discussed in the CPUC's petition and reply to oppositions to its petition, demonstrates most compellingly that the markets for cellular services in California are not currently competitive to produce just and reasonable rates. The CPUC's petition should therefore be granted.

A. Background

Pursuant to the two orders issued by the Wireless Telecommunications Bureau in PR Docket Nos. 94-105 et al., the incumbent cellular carriers in California have filed supplemental comments.[2] These comments purport to address only the confidential data submitted by the CPUC under seal in its petition to the FCC which the FCC released under a protective order. The data falls into two categories: (1) data concerning market share, capacity utilization, and number of subscribers, all of which was provided to the CPUC by the carriers pursuant to a CPUC protective order; and (2) documents identifying marketing strategies employed by cellular carriers which were provided to the California Attorney General ("AG") under confidentiality arrangements.

The material provided under seal and disclosed under protective order is fully corroborative of CPUC findings, based on the publicly available data contained in its petition and reply, that cellular markets in California are not yet adequately competitive to ensure just and reasonable rates to California's

---

2. Order, PR Docket Nos. 94-103, 94-105, 94-106, 94-108, DA 95-111 (Jan. 25, 1995) ("First Confidentiality Order"); Order PR Docket Nos. 94-103, 94-105, 94-106, 94-108, DA 95-208 (Feb. 9, 1995) ("Second Confidentiality Order").

Five parties filed supplemental comments. These were Airtouch Communications ("Airtouch"); McCaw Cellular Communications, Inc. ("McCaw"); Los Angeles Cellular Telephone Company ("LACTC"); GTE Service Corporation ("GTE"); and the Cellular Carriers Association of California ("CCAC").

The supplemental comments will be referenced herein as "Supp."

business and residential consumers. The CPUC does not claim, as GTE believes, that the confidential material standing alone demonstrate lack of competition.[3] The confidential material, however, is fully consistent with the public data and fully supportive of the CPUC's finding that effective competition is absent from California's cellular markets.[4]

AirTouch and its consultant Jerry Hausman ("Hausman"), alone among the carriers, continue to misstate the facts when they say that the CPUC publicly disclosed confidential data.[5] Submission of data under seal does not constitute public disclosure, and AirTouch has failed to convince anyone but itself to the contrary. AirTouch further mischaracterizes the facts when it says that it was denied access to its own data. The opposite is true.[6] AirTouch's misstatement of the facts is

---

3. GTE Supp. at 2.

4. Contrary to AirTouch's complaint, any "procedural morass" was created entirely by AirTouch and the other cellular carriers who have resisted from the outset any and all disclosure of the data which they themselves submitted to the CPUC under seal, and which they have never refuted as relevant. AirTouch Supp. at 2.

5. AirTouch Supp. at 2 n.4. AirTouch simply cannot accept that no violation of state law occurred when the AG gave the CPUC data obtained from AirTouch which the CPUC then submitted to the FCC under seal.

6. Nearly three months ago, at the request of AirTouch, CPUC counsel supplied AirTouch access to the data which it submitted directly to the CPUC. Letter of Dec. 12, 1994 from Ellen S. LeVine (CPUC) to Megan Waters Pierson (Airtouch) attaching requested materials. The CPUC also indicated that AirTouch needed the consent of the AG before it would release the AG data related to AirTouch. To the CPUC's knowledge, Airtouch never sought such consent. Further, AirTouch never asked the FCC to release the data for AirTouch's review until just two days before the FCC prepared to release it pursuant to a protective order.

endemic throughout its filing.

Finally, several carriers introduce a new round of arguments and studies which purport to undercut the CPUC's findings. With the exception of AirTouch, the arguments and studies rehash claims that the CPUC thoroughly rebutted in its reply. The new studies, like the old ones, are fraught with serious error, and simply cannot be considered credible.

AirTouch, for its part, offers an entirely new study by its consultant Hausman under the guise of responding to the FCC's confidentiality orders. The study suffers from the same serious defects that his earlier studies exhibited. In any event, the new flawed study has little, if anything, to do with the confidential data. It has everything to do with AirTouch's ongoing attempt to concoct studies which attempt to prove what it has been, and still is, unable to prove -- that despite the extraordinarily high returns on net investment enjoyed by a mature cellular industry with currently high entry barriers, California cellular markets are somehow competitive. In fact, they are not.

In sum, the CPUC has presented substantial evidence to demonstrate that market conditions in California are not yet adequately competitive to ensure just and reasonable rates for California consumers of cellular services. This finding has not been undermined by the duopoly cellular carriers. The CPUC has thus met the standard set forth by Congress in the Omnibus Budget Reconciliation Act ("Budget Act"). Its petition for continued regulatory oversight for a limited period of time should therefore be granted.

I. THE CPUC HAS MET THE STATUTORY STANDARD PRESCRIBED BY CONGRESS IN DEMONSTRATING THAT CONTINUED REGULATORY OVERSIGHT OF THE CELLULAR INDUSTRY IN CALIFORNIA IS WARRANTED

A. The CPUC Has Correctly Applied the Statutory Standard Expressly Set Forth in the Budget Act

Section 332(c)(3) of the Budget Act sets forth the standard that a state must meet in order to retain regulatory oversight of commercial mobile radio services. The CPUC has met that standard.

Nevertheless, GTE and McCaw continue to insist that the CPUC must meet an antitrust standard. Among other things, they say that the CPUC must show collusion or price fixing between the duopolists in a given market.[7] As discussed in our reply, there simply is no basis for that claim, and the carriers cite none. Neither the FCC nor the CPUC are charged with enforcing federal and state antitrust laws. They are, however, charged with ensuring that the rates charged by common carriers are just and reasonable to consumers. In making this determination, it is not necessary, or even appropriate, to undertake an antitrust analysis.

Both carriers further argue that since the FCC made a finding concerning the degree of competitiveness of interstate cellular markets, somehow this applies equally to intrastate cellular markets. The argument is contrary to congressional intent. By including Section 332(c)(3) in the Budget Act,

---

7. GTE Supp. at 18.

Congress expressly recognized that intrastate cellular markets may not in fact be competitive. Had Congress adopted the argument of these carriers, Section 332(c)(3) would have been superfluous.

McCaw also continues to advocate a statutory test of its own making to defeat the CPUC's petition. It suggests that such a test was adopted by the FCC, but McCaw cannot cite any order which supports its claim.[8] In fact, the FCC rejected such a test for good reason.[9] The test is so vague and so onerous that, as a practical matter, no state could meet it.[10] McCaw itself candidly admits that satisfying this test is an "unlikely event."[11] In short, had Congress intended to adopt McCaw's test, it would have simply preempted the states altogether from regulating cellular service rates. Congress, however, did not do that.

GTE also claims that the FCC should consider the effects of any proposed action on competition.[12] The CPUC agrees. Given the existing absence of competition in California cellular

---

8. McCaw Supp. at 8.

9. In the Matter of Implementation of Section 3(n) and 332 of the Communications Act, Second Report and Order, 9 FCC Rcd 1411, 1504, ¶¶ 243, 250.

10. Among other things, McCaw's test presumes that state regulation imposes "marginal benefits" but "substantial costs" to consumers. This is like asking the question, "when did you stop beating your wife?"

11. McCaw Supp. at 8.

12. GTE Supp. at 15.

markets, continued regulatory oversight of the industry by the CPUC will further the competitive entry of switch-based resellers who will inject needed competition until ESMR and PCS become effectively competitive realities in cellular markets.

The CPUC further agrees that the purpose of federal policy is not to protect reseller competitors per se. GTE, however, fails to understand that the existence of viable competitors to the duopoly cellular carriers will benefit consumers by giving them additional choice and lower prices. Accordingly, GTE's suggestion that the interests of resellers are irrelevant under federal policies to encourage competition is simply wrong. GTE in fact cites to an FCC order in which the FCC itself factors resellers into the competitive equation for cellular service.[13]

GTE further suggests that even if the behavior of the cellular industry demonstrates undue market power under antitrust principles, it must be shown that "the benefits resulting from the behavior outweigh the costs of diminished competition."[14] This logic is perverse. No benefits at all accrue to consumers who are subject to the undue market power of the cellular industry. Undue market power by definition imposes excessive costs on consumers in the form of higher prices and lack of

---

13. GTE Supp. at 20.

14. GTE Supp. at 16. In addition, GTE fails to explain how preserving the undue market power of the duopoly carriers will "reduc[e] barriers to new customers..." In fact, just the opposite will occur, reducing the degree of consumer choice from among alternative providers.

competitive alternatives that are not outweighed by any supposed "benefits" in permitting the carriers to continue exercising such power.[15]

In sum, the ongoing effort by the cellular carriers to circumvent the statutory test that Congress has adopted, the FCC has recognized, and that the CPUC has satisfied should be dismissed.

B. The CPUC Properly Relied On U.S. Department Of Justice Guidelines In Finding That Intrastate Cellular Markets Are Not Yet Competitive

McCaw continues to attack the use of the Merger Guidelines adopted by the U.S. Department of Justice ("DOJ") in analyzing the degree of competitiveness in intrastate cellular markets.[16] As discussed in our petition and reply, the Merger Guidelines are commonly used in assessing markets. The FCC itself has recognized their usefulness for this purpose.[17] And most recently, Pacific Bell has applied them in order to support its application for a waiver from the Department of Justice to enter

---

15. In addition, no carrier has presented any evidence that demonstrates that the CPUC has prevented the efficient use of the spectrum, improvements in service, or the introduction of advanced technology by the wireless industry. By the carriers' own admission, all have occurred at a rapid pace, under the CPUC's regulatory oversight.

16. McCaw Supp. at 10.

17. In the Matter of Implementation of Sections 3(n) and 332 of the Communications Act, Third Report and Order, slip op. at 27.

the interLATA market.[18] The fact that these cases did not involve mergers does not diminish the value of the Merger Guidelines. The same is true here. McCaw's arguments to the contrary are simply meritless.

II. SUBSTANTIAL BARRIERS TO ENTRY HAVE PROTECTED INCUMBENT CELLULAR CARRIERS AND HAVE PREVENTED THE EMERGENCE OF COMPETITIVE ALTERNATIVES IN CALIFORNIA CELLULAR MARKETS

As demonstrated in our petition and reply, substantial barriers to entry into California cellular markets are currently in place and will continue for the near future, absent an unbundling program, to prevent competitive entrants from effectively competing with the duopoly cellular carriers. The duopoly carriers' supplemental comments continue to ignore or casually dismiss these barriers.

First, the duopoly carriers reargue that since the legal barriers to entry are not of their own making, such barriers somehow are no longer relevant to the appropriate regulatory treatment of the cellular industry.[19] As the CPUC stated, the purpose of extended authority to regulate rates is to remedy the effects of restricted entry, regardless of cause.[20] According

---

18. United States v. Western Electric Co., Inc., et al., Civ. Action No. 82-0192, Mot. of Pac. Tel. Group for Waiver to Provide Interexchange Services to Customers in California (Jan. 31, 1995). The Federal Trade Commission likewise applied the Merger Guidelines in support of its finding that the cellular service industry is not competitive. See CC Docket No. 91-34.

19. Airtouch Supp. at 4; GTE Supp. at 19.

20. CPUC Reply at 19.

to the carriers' logic, had the FCC initially licensed only one carrier in each market, the monopolist should not be regulated because its monopoly was not of its own making.

Second, the duopoly carriers continue to maintain that Nextel and/or PCS have already entered California markets and offer cellular-like services to customers. The claim is simply contrary to established fact. Nextel still does not provide stand-alone, cellular-like service to a single customer in California in competition with any cellular carrier. For reasons known only to the duopoly carriers, they refuse to acknowledge this fact -- even when stated by Nextel's own executive.[21] Instead, they carefully state that Nextel provides "service" in California, but fail to acknowledge, as they should, that such service is not stand-alone cellular service.[22]

Similarly, the duopoly carriers' claim that PCS is operational in California is another misstatement of fact.[23] Licenses for broadband PCS, a likely competitor to cellular service, have not even been issued yet. Not surprisingly, the carriers identify no PCS provider who is currently serving customers in California.

GTE further argues that "[t]there currently exist numerous paging and SMR operators in each cellular market and wide-area

---

21. CPUC Reply, Affidavit of Kevin Gavin, App.F.

22. AirTouch Supp. at 21.

23. AirTouch Supp. at 4 and Hausman Affidavit at 8.

SMR operators in some larger markets." [24] GTE tellingly never identifies a single provider in such markets which actually competes directly with cellular for the simple reason that there are not any. McCaw also says that the industry is "already experiencing new entry" without specifying from whom.[25]

Finally, no one except LACTC argues that paging and dispatch services are viable substitutes for cellular service. As the CPUC explained, under current technology, paging and payphones are not viable substitutes for consumers caught in commute traffic, for consumers in rural areas where payphones may be scarce, or for security-minded consumers.[26] McCaw's consultant, Bruce Owen ("Owen"), in fact agreed that cellular, ESMR and PCS comprise a market which is distinct from other wireless markets.[27]

The fact remains that for the near future, there simply are no new facilities-based market entrants who could place competitive pressure on the duopoly cellular carriers. That will not occur until entrants like Nextel and PCS providers have widely deployed an infrastructure that can deliver cellular-like services in California. The argument that cellular carriers "will soon face competition" from these carriers proves nothing other than that the infrastructure enabling such competition is

---

24. GTE Supp. at 21.

25. Owen Affidavit, McCaw Supp. at 2.

26. CPUC Reply at 13 and n.15.

27. McCaw Opp.to CPUC Pet., Exh. A at 9.

not currently in place.[28] Without a widely deployed network and available customer equipment, the fact that spectrum is, or soon will be, allocated to ESMR or PCS services is not sufficient in and of itself to qualify these services as viable substitutes for cellular service.[29] In fact, as Hausman so graphically illustrates, it was only after PCS became operational in the United Kingdom ("UK") that cellular service prices fell some 30 percent.[30] The UK experience also demonstrates that prices declined only after PCS networks became operational, not when additional spectrum became available.

At the same time, as discussed, the CPUC is actively implementing its unbundling program to enable switch-based resellers to enter the market in the eighteen month period for which the CPUC requests continued regulatory oversight. Such entry should place additional competitive pressure on the duopoly carriers, and lead to lower, and more reasonable, cellular rates for customers.

---

28. McCaw Supp. at 10.

29. As the CPUC explained, it is indisputable that entry into the wireless market is not simultaneous with acquisition of spectrum, and that creation of a geographically dispersed network, requiring several months and substantial resources to implement, is a precondition of market entry. CPUC Reply at 20.

30. Hausman Affidavit at 7.

III. THE MARKETS FOR CELLULAR SERVICES IN CALIFORNIA ARE HIGHLY CONCENTRATED AND ARE EVIDENCE OF UNDUE MARKET POWER

As the CPUC explained in its petition and reply, cellular markets in California are highly concentrated by any measure -- whether by capacity, output or sales. Such high concentration is evidence of undue market power.

Specifically, the CPUC properly applied the DOJ Merger Guidelines, expressly endorsed by the CCAC, and demonstrated that two-way voice wireless markets are highly concentrated using any measure. To be sure, even measuring market share by capacity, as advocated by the cellular carriers, and including uncommitted entrants as defined by the DOJ Merger Guidelines, these guidelines produce a Herfindahl-Hirschman Index ("HHI") of 3750 for the cellular industry in California.[31] This is nearly double the HHI figure of 1800, which indicates a highly concentrated industry. It is also well in excess of the more stringent HHI factor of 2500, the factor advocated by McCaw as evidence of a highly concentrated industry.

AirTouch finally concedes, as it must, that the CPUC "did calculate the [HHI] considering projections of ESMR and PCS

---

31. McCaw refuses to acknowledge that the CPUC recalculated the HHI without "assuming away competition between cellular carrier." McCaw Supp. at 13. The recalculation produced an HHI of 3750, still well above McCaw's HHI factor of 2500 as indicative of a highly concentrated market.

providers share in the market" under AirTouch's approach.[32] AirTouch nevertheless criticizes the CPUC for not considering competition at the margin. AirTouch simply misses the point. Currently, there is no other new provider that offers cellular-like service to customers. Thus, today there is no competition at the margin. The CPUC readily concedes that when switched-based resellers and ESMR and PCS providers are developed, there will be competition at the margin, and at that time the market for cellular service will not be highly concentrated. That is not the situation today or for the near term.

Finally, the carriers attempt to make much of their claim that changes in market share of certain cellular carriers in particular markets from 1989-1993 are indicative of a competitive cellular industry. The claim, however, is discredited by one of their own members, who conceded that "[d]ata indicating a decline or increase in market share does not indicate how competitive a market is ..."[33]

In any event, cellular market shares have remained remarkably stable in the the face of rapid growth and technological change. Between 1989 and 1993 market share in California's four major markets -- Los Angeles, San Francisco-Oakland-San Jose, San Diego and Sacramento -- have shifted just 1.65% on average per year. This stability is striking

---

32. AirTouch Supp. at 10. In its reply, the CPUC also assessed market concentration without combining the market shares of the duopolists in a market. McCaw Supp. at 13.

33. GTE Supp. at 7.

considering that these markets have grown by 187% over the same four year period. It is also curious that neither carrier in any of these four markets has been able to exploit any technical advantages over its rival.

In sum, the evidence demonstrates that cellular markets have been and continue to remain highly concentrated. Such concentration is consistent with undue market power.

IV. THE SUPRACOMPETITIVE RETURNS EARNED BY CELLULAR CARRIERS IN CALIFORNIA ARE EVIDENCE OF UNDUE MARKET POWER

Based on the data submitted to the CPUC by the cellular carriers themselves, the duopoly cellular carriers are earning returns on their investment that are far in excess of what would be earned in a truly competitive market, and thus evidence undue market power. During the period 1988-1993, the six cellular carriers in the three major urban markets in California earned returns averaging 30.9 percent over 1989-1993.[34] In particular, AirTouch earned a return averaging 38.3 percent and LACTC earned a return averaging 56.2 percent. These returns are based on after-tax rates of return on net investment, calculated from carrier-provided, unaudited annual reports to the CPUC. Thus, contrary to CCAC's misstatement, they include the "substantial

---

34. Moreover, AirTouch cannot explain why its own risk-adjusted returns of 20 percent for the cellular industry are still well below the 30.9 percent average returns actually earned by the cellular carriers during 1988-1993. The risk premium added by Airtouch does not mask the fact that these returns are supracompetitive.

capital investment" made by the carriers. Moreover, these returns are understated --- the actual return on equity earned by partners would be even higher than the reported return on net plant to the extent that investments are financed with leveraged capital, a common practice in the cellular industry.[35]

Q-ratio analysis, used by the FCC itself in assessing the market power of the cable industry and of Pacific Telesis (now AirTouch), further indicates that cellular carriers possess undue market power. In a competitive industry, the Q-ratio (i.e., the ratio between a firm's market price and the replacement cost of its assets) is close to 1. In the cellular industry, the Q-ratio is between 6.7 and 13.5. The additional value assigned to cellular firms well beyond the value of their assets reflects the expectation of duopoly rents.

Not surprisingly, no carrier mentions, let alone refutes, any of this evidence. Nor do any of the carriers acknowledge the fact, as reported in Value Line, that the telecommunications services industry as a whole earned only 13.9 percent return over the same period.[36] LACTC in particular earned a return more than four times that amount, while AirTouch earned a return nearly three times that amount. The duopoly carriers earned such returns, notwithstanding that the period 1990-1993 constituted "the worst recession experienced in California since the end of

---

35. CCAC Supp. at 14.

36. CPUC Reply at 37.

World War II."[37]

To downplay this evidence, the carriers attempt to deflate these extraordinary returns by arguing first, that the CPUC relied upon accounting rates of return, and second, that the CPUC failed to impute a spectrum value or opportunity cost which would downwardly adjust these high returns. The carriers' arguments have no more merit now than they did before. In particular, recent events demonstrate how unsound the spectrum value arguments actually were.

Specifically, while attempting to discredit the use of accounting rates of return, the cellular carriers ignore the candid admission of their own experts who said that it was impractical to use so-called "economic rates of return." As these experts conceded, "the economic rate of return is difficult -- perhaps impossible -- to compute for entire firms. Doing so requires information about both the past and the future which outside observers do not have, if it exists at all."[38] Moreover, these experts' theory has been subject to serious criticism by other experts, who note in particular that the examples cited by the duopoly carrier experts are industry extremes and not at all representative of most industries.[39]

---

37. AirTouch Hausman Affidavit at 4. CCAC concocts an argument that the CPUC improperly compared the supracompetitive returns earned by the duopoly cellular carriers to returns earned by the energy industry. CCAC apparently has chosen ignore the CPUC's comparison to Value Line data for telecommunications services.

38. CPUC Reply at 41, citing Fisher-McGowan.

39. CPUC Reply at 38-39.

LACTC further attempts to explain away the extraordinary returns that it and other carriers earned by pointing to the lower returns earned by cellular carriers serving medium, small, and rural markets.[40] They claim that the lower returns earned by carriers serving these markets reflect the lower demand for service in these areas. The CPUC agrees. However, no conclusion can be drawn concerning the effect of market structure. In areas of lower demand and fewer customers, one would naturally expect that the returns earned would be commensurately lower.

In any event, the CPUC examined a number of other carriers serving small and mid-sized markets. Rates of return for cellular carriers serving these markets actually exceed those of the larger carriers in our original study. Carriers with over $4 million in revenue earned an average of 35.8 percent on net plant in 1993 and four carriers, Napa, Cagal, Ventura and Stockton earned over 55 percent on net plant. Thus, contrary to the carriers' arguments, these carriers likewise exercise undue market power.

The additional claim by LACTC that the supracompetitive returns earned by the duopoly carriers have declined in some cases over a five year period does not discount the fact that, for LACTC and numerous other carriers, the returns have nevertheless remained consistently well above the levels commensurate with a competitive market during this period. In

---

40. LACTC Supp. at 6.